Am indment and Responsi Application No. 09/976,674 Page 3

## <u>Amendments to the claims:</u>

Claims 1-21 (cancelled) :

22. (New): Isolated nucleic acid which encodes (a) a polypeptide, which includes the amino acid sequence of SEQ ID NO: 3 or (b) a polypeptide having an amino acid sequence that is at least 90% similar thereto and exhibits the same biological function; or a shortened fragment of either which exhibits essentially the same biological activity, or

which is complementary to any one of the foregoing.

- 23. (New): The isolated nucleic acid of claim 22 which is DNA or RNA.
- 24. (New): The isolated nucleic acid of claim 22 which is a DNA transcript that includes the entire length of SEQ ID NO: 3 or which is complementary to the entire coding region of SEQ ID NO: 3.
- 25. (New): An antisense oligonucleotide directed against the DNA of claim 24.
- 26. (New): The isolated nucleic acid of claim 22 which is an RNA transcript which includes the entire length of SEQ ID NO: 3.
- 27. (New): An expression vector comprising the nucleic acid of claim 22 encoding a polypeptide having the entire amino acid sequence set forth in SEQ ID NO: 3 operably linked to a promoter, said expression vector being present in a compatible host cell.
- 28. (New): An isolated recombinant polynucleotide molecule comprising nucleic acid according to claim 22 plus expression-controlling elements linked operably with said nucleic acid to drive expression thereof.
- 29. (New): A mammalian, insect or bacterial host c il that has been genetically engine red by the insertion of nucleic acid according to claim 22 which



Am ndm nt and Respons Application No. 09/976,674 Page 4

codes for at least the mature protein portion of the amino acid sequence of SEQ ID NO: 3.

- 30. (New): A process for producing a polypeptide which includes the mature protein portion of SEQ ID NO: 3, which process comprises culturing the host cell of claim 29 under conditions:sufficient for the production of said polypeptide.
- 31. (New): The process of claim 30 wherein said polypeptide is expressed at the surface of said cell and further includes the step of recovering the polypeptide or a fragment thereof from the culture.
- 32. (New): Isolated nucleic acid which is an alternative splice variant of SEQ ID NO: 4, and which has one of SEQ ID NOS: 24, 26, 28, 30, 34, 36, 38 and 40.
- 33. (New): Isolated nucleic acid which contains is an alternative splice variant of SEQ ID NO: 4 which contains a region extending between a start codon and a stop codon that encodes a polypeptide that exhibits prolyl oligopeptidase activity.
- 34. (New): The isolated nucleic acid of claim 33 which has one of SEQ ID NOS: 24, 28, 34 and 36.
- 35. (New): Isolated nucleic acid which encodes a polypeptide, which includes the amino acid sequence of SEQ ID NO: 3 or a shortened fragment thereof which exhibits prolyl oligopeptidase activity, or which is complementary thereto.
  - 36. (New): The isolated nucleic acid of claim 35 which is DNA.
- 37. (New): An antisense ollgonucleotide directed against the DNA of claim 36.
- 38. (New): The isolated nucleic acid of claim 35 which is an RNA transcript which includes the entire length of SEQ ID NO: 4.



Amendm nt and Response Application No. 09/976,674 Page 5

- 39. (New): An expression vector comprising the nucleic acid of claim 35 encoding a polypeptide having the entire amino acid sequence set forth in SEQ ID NO: 3 operably linked to a promoter, said expression vector being present in a compatible host cell.
- 40. (New): An isolated recombinant polynucleotide molecule comprising nucleic acid according to claim 35 plus expression-controlling elements linked operably with said nucleic acid to drive expression thereof.
- 41. (New): A mammallan, insect or bacterial host cell that has been genetically engineered by the insertion of nucleic acid according to claim 35 which codes for at least the mature protein portion of the amino acid sequence of SEQ ID NO: 3.



- 42. (New): A process for producing a polypeptide which includes the mature protein portion of SEQ ID: NO: 3, which process comprises culturing the host cell of claim 41 under conditions sufficient for the production of said polypeptide.
- 43. (New): The polypeptide comprising the mature protein portion of SEQ ID NO: 3 produced by the process of claim 42.